



US005450519A

United States Patent [19]

Iwanski et al.

[11] Patent Number: 5,450,519

[45] Date of Patent: Sep. 12, 1995

[54] FIBER OPTIC COUPLER ASSEMBLY

[75] Inventors: Thomas E. Iwanski, Tiverton, R.I.;
James A. Doucet, Fall River, Mass.

[73] Assignee: The United States of America as
represented by the Secretary of the
Navy, Washington, D.C.

[21] Appl. No.: 236,823

[22] Filed: May 2, 1994

[51] Int. Cl.⁶ G02B 6/38

[52] U.S. Cl. 385/138; 385/139;
385/76; 385/70

[58] Field of Search 385/138, 139, 134, 76,
385/70, 130

[56] References Cited

U.S. PATENT DOCUMENTS

3,790,791	2/1974	Anderson	385/76
4,759,601	7/1988	Knutsen et al.	385/138
4,822,130	4/1989	Maranto et al.	385/138
5,263,111	11/1993	Nurse et al.	385/130
5,283,853	2/1994	Szegda	385/139

FOREIGN PATENT DOCUMENTS

62-66206 3/1987 Japan 385/138

Primary Examiner—Rodney B. Bovernick

Assistant Examiner—Yisun Song

Attorney, Agent, or Firm—Michael L. McGowan;

Prithvi C. Lall; James M. Kasischke

[57]

ABSTRACT

There is presented a fiber optic coupler assembly for disposition in an underwater bulkhead, the coupler assembly comprising a hydraulic fitting portion of substantially cylindrical configuration and having first threads on an exterior portion thereof. A first shank portion extends axially from the fitting portion and has formed thereon as an integral portion thereof a collar portion configured as a nut. A second shank portion extends axially from the collar portion, and a hub portion extends axially from the second shank portion and has second threads thereon. A tubular portion extends axially from the fitting portion in a direction opposite from the first shank portion. A bore extends through the tubular portion, fitting portion, first shank portion, second shank portion, and hub portion and is configured to receive known fiber optic terminators.

9 Claims, 4 Drawing Sheets

